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Serial No. : 10/675,598  
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**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A power generation system, comprising:  
a decomposition chamber;  
a solid impellant material containing at least one of a peroxide and a superoxide;  
a solvent in the decomposition chamber to liquefy and chemically decompose the solid impellant material, thereby releasing thermal energy;  
a power generator to convert the thermal energy into at least one of mechanical energy and electrical energy; and  
a power transmission to transfer the converted energy for performing work.
2. (Previously Presented) The power generation system of claim 1, wherein the power generator comprises at least one of a steam turbine, a thermoelectric generator, and a propulsion engine.
3. (Previously Presented) The power generation system of claim 2, wherein the power transmission comprises at least one of a shaft, an electric generator, and an electric motor.
4. (Previously Presented) The power generation system of claim 1, wherein the solid impellant material comprises at least one of sodium peroxide, potassium peroxide, lithium peroxide, potassium superoxide, urea peroxide, sodium perborate, peracetic acid, peracetic salt, persulfate acid, persulfate salt, peroxide adduct, percarbonate acid, and percarbonate salt.
5. (Previously Presented) The power generation system of claim 4, wherein the solid impeller material comprises at least one of sodium peroxide, potassium peroxide, and potassium superoxide.

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6. (Previously Presented) The power generation system of claim 5, wherein the solid impeller material comprises potassium superoxide.
7. (Previously Presented) The power generation system of claim 1, wherein the solvent comprises at least one of water, polar organic alcohols, and polar organics.
8. (Previously Presented) The power generation system of claim 7, wherein the solvent comprises at least one of water, propylene glycol, ethanol, methanol, and isopropanol.
9. (Previously Presented) The power generation system of claim 8, wherein the solvent comprises water.
- 10-11. (Cancelled)
12. (Previously Presented) A process for releasing energy in an energy source, comprising:  
providing a decomposition chamber containing a solvent;  
dissolving a solid impellant material containing at least one of a peroxide and a superoxide;  
solubilizing the solid impellant material in the solvent to liquefy and chemically decompose the solid impellant material into a liquified peroxide for releasing thermal energy;  
converting the thermal energy into at least one of mechanical energy and electrical energy; and  
transferring the converted energy for performing work.
13. (Previously Presented) The process of claim 12, wherein the solid impeller material comprises at least one of peroxide, superoxide and combinations thereof.
14. (Previously Presented) The process of claim 12, wherein the solid impeller material comprises at least one of sodium peroxide, potassium peroxide, lithium peroxide, potassium

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superoxide, urea peroxide, sodium perborate, peracetic acid, peracetic salt, persulfate acid, persulfate salt, peroxide adduct, percarbonate acid, and percarbonate salt.

15. (Previously Presented) The process of claim 14, wherein the solid impeller material comprises at least one of sodium peroxide, potassium peroxide, and potassium superoxide.

16. (Previously Presented) The process of claim 15, wherein the solid impeller material comprises potassium peroxide.

17. (Previously Presented) The process of claim 12, wherein the solvent comprises at least one of water, polar organic alcohols, and polar organics.

18. (Currently Amended) The process of claim 17, wherein the  $\phi$ -solvent comprises at least one of water, propylene glycol, ethanol, methanol, and isopropanol.

19. (Previously Presented) The process of claim 18, wherein the solvent comprises water.

20. (Original) A power generation product produced by the process of claim 12.